The frequency of joint hypermobility in Turkish schoolchildren: effects to physical activity, balance, pain and quality of life

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Background: Recent studies have focused on the joint hypermobility (JH) to show the association with musculoskeletal pain, functional disability, motor development and psychological distress (1). In contrast, in some publications, the negative effects of JH in childhood were not observed (2).

Objectives: The aim of this study was mainly to determine the frequency of JH in Turkish schoolchildren and to investigate whether relationship between JH and pain, physical activity level and the balance. In addition, the study aimed whether JH has an impact on the quality of life.

Methods: This cross-sectional school-based study evaluated 737 children (52.5% girls) from 8 to 14 years of age, and the data were collected in 2018 in the city of Denizli, Turkey. Firstly, each of the participants was individual assessed by a clinician on the Flamingo Balance Test for stability and Beighton for the diagnosis of JH. According to Beighton, children who scored ≥5 were accepted as hypermobile. Secondly, all participants completed the self-reported measures for the screening of physical activity level and quality of life. Also, pain severity was quantified by the Visual Analogue Scale (VAS) that is ranging from no pain (score: 0 mm) to worst pain (score: 100 mm) in the last month.

Results: The prevalence of JH in schoolchildren was 19.7% in Turkish population (Table 1). The mean pain severity was 1.29±2.024 in all children. Significant differences were found between hypermobile and non-hypermobile groups in social and school functioning (p<0.05), but no significant differences were found in pain, physical activity level (p>0.05) (Table 2). Beighton score was not significant correlated with pain severity, physical activity, quality of life and balance in childhood (p=0.515, p=0.986, p=0.512, p=0.362 respectively).

Conclusion: As a result, the existence of hypermobility in children had an impact on school and social functions. However, it has been observed that hypermobility does not have a negative effect on these children’s pain, balance, physical activity level, and physical and emotional functions.

REFERENCES

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Clinical picture of 7 PAPA patients followed in a single pediatric rheumatologic center

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Background: Pyogenic sterile arthritis, pyoderma and acne (PAPA) syndrome is an autosomal dominant inflammatory disorder caused by mutations in the PSTPIP1 gene primarily affecting joints and skin. The E250K mutation cause the hypercinzaemia/hypercalprotectinemia syndrome termed PSTPIP1-associated-related proteinemia inflammatory (PAMI) syndrome in which a bone marrow involvement is reported

Objectives: To describe the clinical presentation of 7 PAPA patients followed at a single pediatric rheumatologic center.

Methods: For each patient clinical and laboratory data were collected from medical charts. PSTPIP1 was sequenced through Sanger Sequencing or targeted resequencing using a customized panel, and analyzed with the NextSeq® platform (Illumina) for each patient clinical and laboratory data were collected from medical charts. PSTPIP1 was sequenced through Sanger Sequencing or targeted resequencing using a customized panel, and analyzed with the NextSeq® platform (Illumina)

Results: We describe 7 patients from 4 unrelated families with the E250K mutation the cause the hypercinzaemia/hypercalprotectinemia syndrome termed PSTPIP1-associated-related proteinemia inflammatory (PAMI) syndrome in which a bone marrow involvement is reported

Disclosure of Interests: None declared